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TIMBER CUT FROM MISSOURI'S EASTERN OZARK REGION

HARVEST OF GROWING STOCK EXCEEDS 250,000 CORDS

At the time of the last forest survey of Missouri, conducted in 1958 through 1960, about 253,000 cords of growing stock, including 96.5 million board feet of sawtimber, were being cut from the Eastern Ozarks annually. This cut was only 1 percent of the growing stock inventory and 3 percent of the sawtimber inventory.

In addition to growing stock, about 201,000 cords of sound material in hardwood limbs and cull trees were cut each year. However, most of this was left in the woods because it didn't meet quality standards required by the some 400 primary wood-using plants in the region.

The Eastern Ozark Region includes Bollinger, Butler, Carter, Crawford, Dent, Iron, Madison, Oregon, Reynolds, Ripley, St. Francois, Shannon, Washington, and Wayne Counties. Production figures from forest industries, stump counts from forest inventory plots, cutting records from industrial and public landowners, and utilization factors found during logging studies were used to estimate the timber cut.

Most of the growing stock cut in the Eastern Ozarks was oak. White oak alone accounted for almost 30 percent of the total (table 1). About four-fifths of the timber cut came from private holdings and most of the remainder from National Forest land (table 2). About 80 percent of the volume came from trees of sawtimber size, more than half from trees 11.0 inches to 16.9 inches d.b.h. (table 3).

Table 1.--Current annual timber cut by species and kind of material, Eastern Ozark Region, Missouri, 1959

Species	Growing stock			Sawtimber			Cull trees and hardwood limbs
	Total	Pole-timber trees	Saw-timber trees	Total	In saw-timber stands	In other stands	
	Thousand cords	Thousand cords	Thousand cords	Million bd. ft.	Million bd. ft.	Million bd. ft.	Thousand cords
Softwoods							
Pine, shortleaf	29.5	6.5	23.0	9.1	--	9.1	0.2
Redcedar	1.6	--	1.6	.6	--	.6	.1
All softwoods	31.1	6.5	24.6	9.7	--	9.7	.3
Hard Hardwoods							
Oak, white	72.9	17.7	55.2	28.5	3.0	25.5	63.1
Oak, post	39.9	9.7	30.2	10.9	1.1	9.8	34.4
Oak, other white	9.6	2.3	7.3	3.9	.4	3.5	8.3
Oak, black	44.5	7.1	37.4	18.8	2.4	16.4	42.1
Oak, scarlet	7.9	.6	7.3	3.8	.5	3.3	7.8
Oak, northern red	11.8	3.1	8.7	4.2	.5	3.7	10.1
Oak, other red	7.2	.6	6.6	3.4	.4	3.0	7.0
Hickory, Group A	2.9	.5	2.4	1.1	.3	.8	2.6
Hickory, Group B	.3	--	.3	.2	--	.2	.3
Maple, hard	.5	(1/)	.5	.2	--	.2	.4
Walnut, black	1.7	.1	1.6	.8	.2	.6	1.6
Ash	.6	.1	.5	.2	--	.2	.5
Other	3.6	.2	3.4	1.4	.3	1.1	3.5
All hard hardwoods	203.4	42.0	161.4	77.4	9.1	68.3	181.7
Soft hardwoods							
Elm	4.3	--	4.3	2.1	1.1	1.0	4.8
Maple, soft	1.4	--	1.4	.8	.4	.4	1.6
Sweetgum	1.1	--	1.1	.5	.3	.2	1.0
Blackgum	1.2	--	1.2	.6	.3	.3	1.1
Yellow-poplar	1.0	--	1.0	.4	.2	.2	.8
Cottonwood	6.7	--	6.7	3.5	1.8	1.7	7.0
Other 2/	3.0	--	3.0	1.5	.8	.7	3.0
All soft hardwoods	18.7	--	18.7	9.4	4.9	4.5	19.3
All hardwoods	222.1	42.0	180.1	86.8	14.0	72.8	201.0
All species	253.2	48.5	204.7	96.5	14.0	82.5	201.3

1/ Insignificant amount.
2/ Mainly sycamore.

Table 2.--Current annual timber cut by ownership class and species group, Eastern Ozark Region, Missouri, 1959

Ownership class	Growing stock				Sawtimber			
	Total	Softwoods	Soft hardwoods	Hard hardwoods	Total	Softwoods	Soft hardwoods	Hard hardwoods
	Thousand cords	Thousand cords	Thousand cords	Thousand cords	Million bd. ft.	Million bd. ft.	Million bd. ft.	Million bd. ft.
Federally owned or managed:								
National Forest	39.7	6.5	10.8	22.4	18.8	2.1	5.4	11.3
Other	.7	.1	.3	.3	.3	(1/)	.1	.2
State	2.9	.6	(1/)	2.3	1.2	(1/)	(1/)	1.2
Private:								
Forest industry, large	21.7	2.1	.1	19.5	8.2	.5	(1/)	7.7
Other	188.2	21.8	7.5	158.9	68.0	7.1	3.9	57.0
All ownerships	253.2	31.1	18.7	203.4	96.5	9.7	9.4	77.4

1/ Insignificant amount.

Table 3.--Current annual timber cut by species group and diameter class, Eastern Ozark Region, Missouri, 1959

(In thousand cords)

Species	Total	Tree-diameter class (inches)					
		6-10	12	14	16	18	20+
Softwoods	31.1	25.2	5.9	--	--	--	--
Oaks	193.8	41.1	45.6	28.3	46.5	21.2	11.1
Other hard hardwoods	9.6	.9	--	--	3.8	4.9	--
Soft hardwoods	18.7	--	1.4	1.7	2.3	8.2	5.1
All species	253.2	67.2	52.9	30.0	52.6	34.3	16.2

HARVEST IS MUCH LESS THAN RECOMMENDED CUT

The volume of timber that can be harvested annually during the next decade, while maintaining a well-balanced distribution of age classes and progressively improving the quality and quantity of growing stock, has been estimated. It is called the desirable cut. A comparison of desirable cut with actual cut indicates where surpluses and shortages occur in the timber supply.

In the Eastern Ozarks, the desirable cut of growing stock is about 780,000 cords per year. This is three times the actual cut (fig. 1). But the ratio of desirable to actual cut is not the same for all species and size classes. For example, the harvest of poletimber could be increased sevenfold and the harvest of hickory, thirtyfold and still not exceed the desirable cut. On the other hand, the actual cut of cottonwood already greatly exceeds the desirable cut.

The desirable cut of sawtimber is 156.3 million board feet per year, about 60 million board feet more than the current cut. But the sawtimber volume of a few important timber species such as white oak is being cut too heavily and overcutting is greatest in the larger diameters where high quality is concentrated (fig. 2).

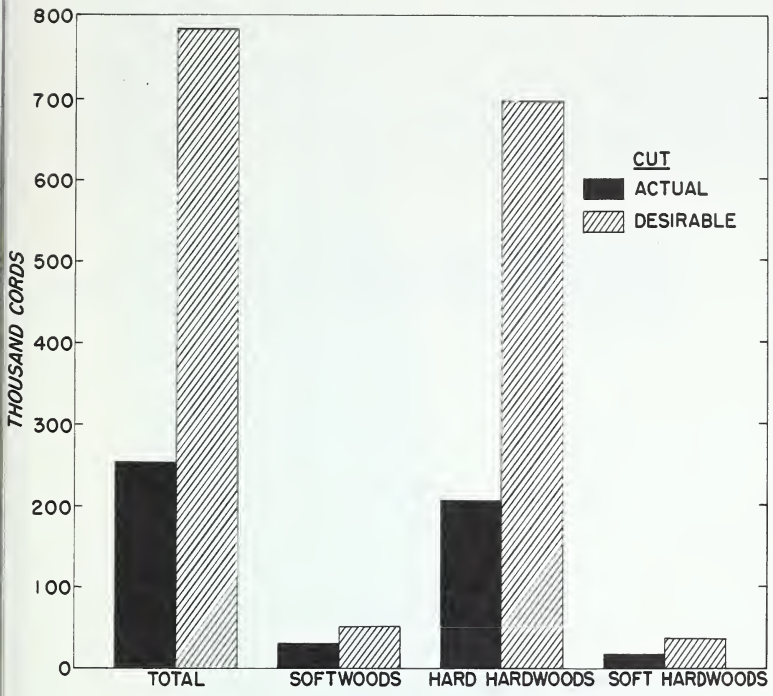

FIGURE 1.-- Current annual desirable cut and actual cut of growing stock by major groups of species, Eastern Ozark Region, Missouri, 1959.

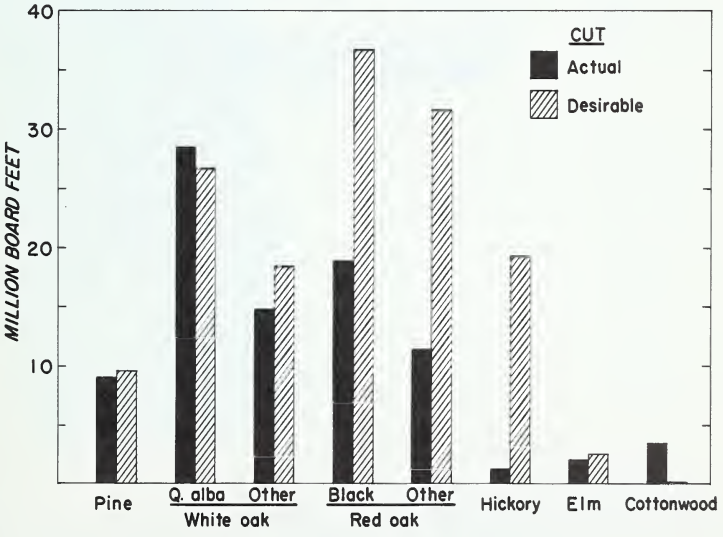

FIGURE 2.-- Current annual desirable cut and actual cut of sawtimber for selected species groups, Eastern Ozark Region, 1959.

The information presented here supplements the data in Bulletin No. 779, "Timber Resources of the Eastern Ozarks," released in June 1961 by the University of Missouri Agricultural Experiment Station. Definitions of the terms used in this report can be found in that bulletin.

David A. Gansner, research forester
Central States Forest Experiment Station
Columbus, Ohio

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